



AN OBJECTIVE STUDY OF THE SPEECH STYLE OF WOODROW WILSON*

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LANGUAGE is a vehicle of thought. When the thought of the writer or speaker has been placed on the page, it can be transmitted to the reader only through symbols arranged in significant combinations. Words, the language symbols, are united into sentences, which in turn make up the unified composition. The whole composition, then, is nothing more than words and the arrangements of words. It does not follow that all arrangements of words make up a unified composition, or a speech; but the composition of speech when on the page consists of only arrangements of words. Professor Edith Rickert says,

. . . the whole effect of literature is due to the technical or artistic arrangement of material—visible and audible words.¹

The possibilities of scientific analysis are limited to the words on the page. It is hoped that, by objective analysis, definite qualities of style may be discovered. Through the very architecture of thought, as that thought appears on the page, qualities and stylistic techniques heretofore unnoticed may be revealed. Professor Rickert says further,

. . . the foundation material for study (of literature) is actually limited to the words as arranged and includes nothing more.²

There are intangible elements within the style itself that defy an objective analysis, since every word is a symbol of emotional experience, and that experience is different for every reader. There is a dual relationship involved. A writer uses definite words and word patterns suitable to his experience and purposes. These words must be interpreted by each reader through a different group of experiences. This means that each reader will probably make a different emotional response; but the technique of the writer,—words and the arrangement of words,—remains constant.

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¹ Rickert, Edith, *New Methods for the Study of Literature*, Chicago; University of Chicago Press, 1926, 3.

² Rickert, Edith, *op. cit.*, 17.

Professor John Manley says,

But great writers have always known, and critics have slowly begun again to recognize, that stylistic effects are due, not to intangible magic, but to the actual forms in which ideas are incorporated . . . a piece of literature must produce its effect solely by means of the symbols through which the artist communicates his ideas to his audience, because there is no other medium between artist and audience.⁸

Since the foundation material for study of oral style is actually limited to the words as arranged on the page, and since stylistic effects are due to the forms in which ideas are incorporated, I have undertaken an objective analysis of Woodrow Wilson's speech style.

The problem undertaken here is to study objectively fifty of Woodrow Wilson's best-known speeches delivered between 1900 and 1920. The purpose of this dissertation is to determine whether Wilson differs, in the use of the items below, in the kinds of speeches, and if so, in what way; and to determine how Wilson's oral style compares with the style of five of his contemporaries and to the style of other orators as reported by various investigators.

The fifty speeches will be analyzed as kinds of speeches and as individual speeches for:

1. Sentence length. The sentence length will be expressed in terms of the number of words in the sentence.

2. Classification of sentences. Sentences are classified according to:

a. Use

- (1) Declarative
- (2) Imperative
- (3) Interrogative
- (4) Exclamatory

b. Structure

- (1) Simple
- (2) Complex
- (3) Compound
- (4) Compound-complex

c. Artistry

- (1) Loose
- (2) Periodic
- (3) Balanced

⁸ Manley, John M., "Introduction" to Edith Rickert's *New Methods for the Study of Literature*, ix.

3. Figures of speech. The figures of speech have been put under five heads:

- a. Metaphor
- b. Simile
- c. Personification
- d. Rhetorical question
- e. Unclassified figures

4. Introductions and conclusions. The introductions and conclusions of the fifty speeches have been studied for:

- a. Length
 - (1) Number of sentences
 - (2) Average sentence length
 - (3) Proportion of the length of the introduction and conclusion to the total length of the speech
- b. Predominant content idea of the introduction
- c. Predominant quality of the introduction
- d. Predominant rhetorical treatment of the introduction
- e. Type of conclusion
- f. Figures of speech in conclusion

The fifty speeches have been grouped into nine kinds: legislative, campaign, eulogy, dedication, anniversary, after-dinner, inaugural, sermon, and lecture.

There are at least four reasons why the present investigation is of importance both to the teacher and to the student. First, the present study brings together and demonstrates the use of methods and techniques for the objective study of oral style; second, it sets up a technique which may be followed by later investigators in the study of speech style of other orators; third, it furnishes the background for further study of Wilson's style; and fourth, it will allow a comparison of the practice of the art of speaking with rhetorical tradition. We shall consider each of the above items in more detail.

It is only recently that the subjective method for the study of speech style has been supplemented by the objective method. Consequently, there are few studies that can serve as precedents. Professor Rickert thinks that the time has come when we should study literature in a new way; she says,

It is time surely to study literature in a better way. . . . This situation is realized by certain educators who make outcry from time to time against the Ph.D. degree as murdering the love of literature and burying it under the dust

of information. They cry out; but what remedy do they suggest? The only remedy, so far as I can see, is to try to find a new and practicable method of analysis by which the qualities of literature can be perceived as well as felt.⁴

Some of the techniques used by Dr. Gladys Borchers⁵ and Dr. Raymond Barnard,⁶ pioneers in the application of the objective method for the study of oral style, have been adopted. Also I have used additional statistical measures to aid in the interpretation of the data, such as graphical descriptions, measures of variability to indicate the spread around the central tendency, critical ratios to determine significance of differences, and reliability measures to take into account size of sampling.

In the second place, this study will furnish the background for a more detailed study of Wilson's speech style. Rhythm patterns, position of phrases and clauses, and number and position of adjectives and so forth, can be studied in relation to the sentence length and kinds of sentences.

When this, and other similar studies have been made, we can compare methods of speaking with rhetorical tradition. It is important to know whether speakers agree or disagree with rhetoricians. This study and others like it will help students of public speaking to know what the styles of the great orators actually were.

Since this investigation has added to the existing methods for the study of speech style, by the use of other statistical treatment of data, and by the setting up of a technique which may be followed by other investigators; and since this study may furnish the background for further study of Woodrow Wilson's style, which will permit a comparison of his style with rhetorical tradition, this study is offered as a worthwhile contribution.

Let us now set forth in detail the experimental procedure followed in this study.

SOURCE OF THE DATA

Fifty of Woodrow Wilson's best known speeches, delivered between 1900 and 1920, were selected for study. About one-fourth of the speeches were found in classified collections, indicating that

⁴ Rickert, Edith, *op. cit.*, 1-2.

⁵ Borchers, Gladys, *A Study of Oral Style*, Unpublished Doctor's dissertation, University of Wisconsin, 1927.

⁶ Barnard, Raymond, *An Objective Study of the Speeches of Wendell Phillips*, unpublished Doctor's dissertation, University of Wisconsin, 1931.

they were among the best known and most frequently quoted speeches. The others were selected on the basis of importance placed by his biographers. The speeches were unedited. Ray Stannard Baker and William E. Dodd⁷ printed each speech exactly as they found it in Mr. Wilson's file, or from whatever source it came. Only complete speeches were selected.

In addition to the fifty speeches by Woodrow Wilson, ten contemporary speeches were studied. These speeches were delivered by Elihu Root, Theodore Roosevelt, Franklin D. Roosevelt, William Jennings Bryan, and Albert Beveridge. These speeches were included in order that we might see more clearly how Wilson's speech style compared with the other orators. Throughout this dissertation, the above five speakers are referred to as "the contemporary speakers."

TREATMENT OF THE DATA

Four steps were followed in the treatment of the data. They are:

1. Classifying the speeches.
2. Selecting the elements for analysis.
3. Tabulating the data.
4. Analyzing the data.

1. *Classification of speeches.* The classifying of speeches according to kind is as old as rhetoric itself. Aristotle says,

Rhetoric falls into three divisions, determined by the three classes of listeners to speeches. . . . From this it follows that there are three divisions of oratory—(1) political, (2) forensic, and (3) the ceremonial oratory of display.⁸

Cicero⁹ and Quintilian¹⁰ follow Aristotle's divisions. Recent writers of speech text books have classified speeches according to kind. The criterion for the classification being subject matter, occasion, and purpose of the speech, our purpose is to see how or whether Wilson made distinctions in the items studied in the kinds of speeches.

The fifty speeches were grouped into nine classifications of kinds

⁷ Baker, Ray Stannard and Dodd, William E., *The Public Papers of Woodrow Wilson*, New York: Harper & Bros., 1926.

⁸ Aristotle, *Rhetoric* (tr. by W. Rhys Roberts) 1358^b.

⁹ Cicero, *op. cit.* Book II.

¹⁰ Quintilian, *De Institutione Oratoria* (tr. by H. E. Butler), Book II, Chapter X and Book III, Chapter IV.

determined by the situation giving rise to the occasion for the speech. About twenty of the fifty speeches had already been classified by Professor O'Neill¹¹ and Professor Brigrance.¹² Those remaining were classified according to the scheme used in "The Elements of Speech."¹³

Of the fifty speeches used there were seven legislative and seven campaign speeches, two eulogies, six dedication addresses, seven anniversary speeches, four after-dinner speeches, four inaugural addresses, five sermons, and eight lectures. The detailed list of speeches classified according to the above grouping with title, place of delivery, and publication may be found in the last section of this publication.

2. *Selection of elements for analysis.* The elements selected for analysis, as previously explained, are: sentence length, classification of sentences, figures of speech, and introductions and conclusions of the speeches. The selection has been made after careful consideration of many factors. The items selected are all important elements of style. Outstanding authorities on speech style bear out this conclusion.

Kinds of sentences, lengths of sentences, and figures of speech have been considered by rhetoricians as essential elements of style. These elements are important because they aid in securing clearness. Aristotle said that the first prerequisite of a good style is clearness: . . . we may therefore assume . . . it as settled that a good style is, first of all, clear. . . .¹⁴

He says, further, that clearness is secured by the correct use of words, by their correct arrangement and by the embellishment through the use of figures of speech. Hope, in discussing the properties of good style, emphasizes force and clearness as essential elements, and tells us how to secure clearness through arrangement. He says,

. . . it is obvious that the first property of a good style is its clearness; in the expression of thought, clearness depends on . . . the proper construction of sentences . . . clearness may be impaired by the excessive length of sen-

¹¹ O'Neill, J. M., *op. cit.*

¹² Brigrance, William M., *op. cit.*

¹³ O'Neill, J. M., and Weaver, Andrew T., *The Elements of Speech*, New York: Longmans, Green & Co., 1926.

¹⁴ Aristotle, *Rhetoric* (tr. by Lane Cooper), Book III, Chapter II, 185.

tences, without any other fault in the construction. The mind is like the lungs,—more fatigued by one long breath than by many ordinary ones.¹⁵

In connection with force, and how to obtain force in style, Mr. Hope¹⁶ discusses the loose and periodic structures. Adams S. Hill¹⁷ points out that force is one of the chief elements in a good style, and tells how force can be obtained through the use of figures. Richard Whately considers that clearness is the first requirement of a good style. He says,

... the first requisite of style not only in rhetoric, but in all composition, is perspicuity.¹⁸

This, he says, can be best secured through proper use of sentences. The second element of a good style, Whately calls "energy." Whately thinks energy can be obtained by the use of figures of speech, and the correct use and distribution of loose and periodic sentences.

From the above discussion, it is clear that sentence length, kinds of sentences, and figures of speech affect clearness and force, which rhetoricians have considered the first essentials of a good style, therefore are fundamental.

The analysis of kinds of sentences, lengths of sentences, figures of speech, and introductions and conclusions of speeches, while it obviously may not account for the total stylistic effect, does give us accurate data on some of the most fundamental characteristics of speech style. Such an analysis was referred to by Manley when he wrote as follows:

Style is a vital organism and consequently is neither the arithmetical nor the algebraic sum of its parts. But in all the sciences of organic life analysis is the necessary preliminary and an indispensable aid to the understanding of the complete functioning of the organism as a whole. Certainly we shall never learn the secrets of style by merely mooning over them or by ejaculating admiration. Every artist who has ever learned a lesson in technique from his predecessors has done so by a more or less incomplete analysis of its elements, by focusing attention upon the manner and means by which individual technical difficulties were overcome and technical successes achieved.¹⁹

¹⁵ Hope, M., *The Princeton Text Book of Rhetoric*, New Jersey: John T. Robinson, 1859, Book III, 174.

¹⁶ Hope, M., *op. cit.* 177.

¹⁷ Hill, Adams S., *The Principles of Rhetoric*, New York: American Book Co., 1878, 89.

¹⁸ Whately, Richard, *Elements of Rhetoric*, New York: Sheldon & Co., 1863, 300.

¹⁹ Manley, John, *op. cit.*, x-xi.

The analysis here used does not cover all possible items. Such elements as kinds of words, position of clauses, rhythm patterns, and others could have been included. But in a study of this nature, it is obviously impracticable to include all possible elements. I have chosen the larger divisions, which seem to me most important, just as they seemed to Professor Manley, Professor Rickert, Dr. Borchers, and Dr. Barnard.

3. *Tabulation of the data.* Each of the fifty speeches in the nine groups was read to secure tabulations of data on:

- a. Sentence length.
- b. Classification of sentences.
- c. Figures of speech.
- d. Introductions and conclusions.

The data tabulated on sentences as outlined in Chapter I includes the following:

- a. The number of sentences and the number of words in each speech.

The procedure followed in tabulating the data on sentences was the usual counting technique.

- b. Sentences were classified according to:

- (1) Use.
 - (a) Declarative
 - (b) Imperative
 - (c) Interrogative
 - (d) Exclamatory
- (2) Structure.
 - (a) Simple
 - (b) Complex
 - (c) Compound
 - (d) Compound-complex
- (3) Artistry.
 - (a) Loose
 - (b) Periodic
 - (c) Balanced

- e. The data on figures of speech included the enumeration of:

- (1) Metaphor
- (2) Simile
- (3) Personification
- (4) Rhetorical question
- (5) Unclassified figures

For this tabulation each speech was read three times. Whenever a question arose as to the kind of figure, it was checked to be returned to later for final decision.

d. The introduction and conclusion of each speech was studied to determine:

- (1) The number of sentences and the number of words in each introduction and conclusion.
- (2) The predominant content idea in the introduction.
- (3) The predominant quality of the introduction.
- (4) Predominant rhetorical treatment of the introduction.
 - (a) Form of composition.
 - (b) Style of composition.
- (5) Type of conclusion.
- (6) Figures of speech in the conclusion.

4. *Statistical treatment of the data.* The statistical treatment of the data made use of:

- a. Central tendency
- b. Variability
- c. Reliability
- d. Relationship

Both tabular and graphical presentations of the data have been given.

a. The measure of central tendency which has been used throughout the present study is the mean or arithmetic average of the frequency distributions. Measures of central tendency are measures of typical or representative of all the measures in a frequency distribution. Since in the field of mathematical statistics the mean can be shown to be the most probable value of a series of measures, and since the mean is popularly known and commonly used, that has been the measure of central tendency calculated for the frequency distributions of lengths of sentences, both of the entire speeches and of the introductions and conclusions of the speeches, as well as for the frequency distributions of the various classifications of sentences and of figures of speech.

b. Measures of variability describe the scatter or spread of the variability of the separate measures around their measure of central tendency. The most commonly used measure of variability is the standard deviation or sigma of the frequency distribution, while the most general measure of the spread is the range or interval between the largest and smallest measures. The range includes 100 per cent

of the distribution. In a "normal"* distribution, the standard deviation or sigma, when measured off above and below the average, marks the limits of the middle of 68.26 per cent, or roughly, two-thirds of the distribution.

In the present investigation, both the range and sigma are used to describe the spread of the measures about the mean. The standard deviation of the distribution has been calculated, because the sigma of the distribution is statistically reliable and is also a necessary step in the computation of some measure of reliability and of some measure of relationship.

c. The "true" measure is the average of an infinite number of measurements made under precisely the same conditions. In actual practice this procedure is impossible. But the amount by which an obtained measure varies can be expressed by some reliability measure known as errors.

In the present study, the reliability measure calculated has been the probable error. When the reliability of the mean is expressed in terms of the probable error, or P.E., of the average, the chances are even that the obtained mean does not differ from the true average by more than the probable error or the index of the reliability of the obtained measure. The P.E. of an obtained mean serves as an index of how good an approximation the obtained measure is of the true measure. In the present study, probable errors have been found for measures of central tendency and measures of relationship.

d. Two measures of relationship have been used in the statistical treatment of the data. Percentages or proportions have been found of the total frequency which any particular frequency is of the total. Relations between measures have been given by the reliability of the difference between the measures. This reliability has been expressed in terms of the probable error of the difference. It is usually customary to make a quotient of 4, obtained by dividing the difference by its probable error, as indicative of complete reliability. This

* A normal distribution when plotted graphically follows the Gaussian bell-shaped curve whose equation is expressed mathematically in the form

$$y = \frac{e^{-x^2}}{2}$$

in which x and y are the two axis and e is the base of the Naperian system of logarithms and is equal to 2.71828.

quotient, called the critical ratio, is a measure of the changes in 100, 1,000, or 10,000 that the obtained difference is the true difference. Percentages have been found to indicate the proportion which any particular frequency is of the total.

GENERAL SUMMARY EVALUATION AND RECOMMENDATION

The present investigation made an objective, statistical study of 50 of Woodrow Wilson's best-known speeches. The results will be summarized under the four major headings used in the study, namely:

- A. Sentence length.
- B. Classification of sentences.
- C. Figures of Speech.
- D. Introductions and conclusions.

SENTENCE LENGTH

The findings on sentence length are as follows:

1. The average length of the 4,362 sentences contained in the fifty speeches studied is 29.26 words. The mean sentence length for the different kinds of speeches does not vary a great deal, with the exception of the two extremes: the after-dinner speeches averaging 34.16 words and the sermons averaging 26.54 words per sentence. The critical ratio which gives the index of superiority, is 7.53, which indicates a statistically reliable superiority in mean sentence length of the after-dinner speech over the sermon. Of the 36 different comparisons of the average sentence length for the nine kinds of speeches, only 6 of the critical ratios exceed 4, which signifies complete reliability.

2. There is considerable variability in sentence length in the different kinds of speeches. In the campaign speeches the sentences range in length from 3 to 243 words, while in the eulogies all the sentences are less than 100 words in length. In the after-dinner speeches in which the standard deviation or measure of spread is greatest, slightly more than two-thirds of the sentences vary in length from 6.91 to 61.41 words, while in the eulogies in which the sigma is smallest, 68.26 per cent of the sentences vary in length from 11.04 to 47.64 words.

3. The variation of mean sentence length is much greater within each kind of speech than is found in the differences between average sentence lengths for the nine kinds of speeches. The small-

est mean sentence length is 19.09 words; the largest mean sentence length is 45.04 words. Both these means occur in anniversary speeches.

4. Graphs of sentence sequences for separate speeches show a rhythmical alternation of long and short sentences.

5. The mean sentence length in Wilson's speeches is slightly greater than that of the five contemporary speakers. The variation in sentence length and the sentence range is greater in Wilson's speeches than in the contemporaries.

6. The mean length of the sentences in Wilson's speeches is slightly less than the mean length for the ten American and British orators studied by Dr. Borchers. No comparison can be made as to variability between kinds of speeches or between speeches of the same kind.

7. The mean sentence length in Wilson's speeches is 29.26 words, or 6.28 words greater than the mean of 22.98 words in the thirty-five speeches of Phillips' which were studied by Dr. Barnard. The variation between the kinds of speeches and between speeches of the same kind is less in Phillips' than in Wilson's speeches. The sentence range is less in Phillips' than it is in Wilson's.

CLASSIFICATION OF SENTENCES

Conclusions of kinds of sentences are summarized according to (1) use, (2) structure, (3) artistry, and (4) in comparison with other studies.

1. *Use.* Ninety-two and eight-tenths per cent of the total number of sentences are declarative; 5.1 per cent are interrogative; 1.6 per cent and .5 per cent are imperative and exclamatory, respectively. A statistically reliable larger percentage of declarative sentences is found in the legislative than in the anniversary speeches. The difference, 4.2 ± 1.1 per cent, between the percentage of interrogative sentences used in anniversary speeches and in sermons insures an almost completely reliable differences in favor of the use of interrogative sentences in the former speeches. There are no exclamatory sentences in either the legislative or campaign speeches. Imperative sentences are found in each kind of speech. Findings on the use of declarative, interrogative, imperative, and exclamatory sentences in the nine kinds of speeches are representative of the findings for the individual speeches.

2. *Structure.* Fifty-nine and two-tenths per cent of the total number of sentences are complex in structure; 28.4 are simple; 7.7, compound-complex; and 4.6 per cent are compound. The largest per cent of complex sentences are found in the legislative speeches; the smallest in the inaugural addresses. The difference yields a critical ratio of 7.67 which insures a true difference in the use of complex sentences in the two kinds of speeches. The difference in the percentages of simple sentences found in the inaugural addresses and the after-dinner speeches is large enough to be statistically reliable. There is a wider variation in the use of simple, complex, compound, and compound-complex sentences between the separate speeches in the different groups than between the groups of speeches. The greatest variation in the use of simple sentences appears in the anniversary speeches in one of which there are only 3.85 per cent and in another 50.00 per cent of simple sentences. The highest percentage use of complex sentences, 84.61 per cent, is found in a dedication address and the lowest, 40.51 per cent, occurs in one of the lectures. There is little variation between the separate speeches in the use of compound or compound-complex sentences.

3. *Artistry.* Sixty-two and five-tenths per cent of the total number of sentences are periodic; 35.9 per cent loose; and 1.6 per cent are balanced. The legislative speeches use a statistically reliable larger percentage of periodic sentences than do the eulogies. Loose sentences are found most often in the latter and least frequently in the former kind of speeches. The difference in use is a true difference. There is little variation in the use of the balanced sentence. The variation between speeches in the use of loose and periodic sentences is the same as was found in the use of simple and complex sentences.

4. *Comparison with other studies.* Very little difference was noted between the percentage of sentences of each kind used by Wilson and the percentage used by his contemporaries, with the exception of the one speech of Beveridge's in which he used a great many interrogative sentences. The average per cent of sentences in Wilson's speeches classified according to use, structure, and artistry, is very similar to that of the 10 American and British orators studied by Dr. Borchers. The difference between Wilson and Phillips in the use of kinds of sentences is very marked. Phillips used a much greater variety of sentences in his speeches than did Wilson.

FIGURES OF SPEECH

The following conclusions may be drawn concerning Wilson's use of figures of speech.

1. The largest number of figures of speech are metaphors, 480, or 34.7 per cent, of the total 1,385 figures. Second in frequency is the rhetorical question; third most frequently used figure is personification. Only 2.4 per cent of the total figures are similes. The least number of figures are found in campaign and legislative speeches and the largest number in commemorative addresses, such as eulogies and after-dinner speeches.

2. In the majority of the separate speeches the per cent of metaphors does not differ much from the mean for the entire group of speeches. In 29 of the 50 speeches there are no similes. In only 5 of the 50 speeches are there more than 6 personifications. The rhetorical questions are fairly evenly distributed in the separate speeches.

3. Wilson follows rhetorical tradition in using metaphors most and similes least frequently. He also follows tradition in using the least number of figures in campaign and legislative speeches and the largest number in commemorative speeches.

4. The proportion and kinds of figures in Wilson's speeches are very similar to that of G. W. Curtis, as shown by Professor Lindsley.

5. Wilson's use of the rhetorical question is the exact opposite of results found in other similar studies. All other studies show the largest per cent of rhetorical questions in legislative, campaign, and those speeches in which the orator seeks immediate over-action, and the least in commemorative speeches. Wilson reversed this practice.

INTRODUCTIONS AND CONCLUSIONS

1. In the 50 speeches there are, on an average, 7.76 sentences and a range from one to 25 sentences in the introductions; an average of 8.12 sentences and a range from one to 27 sentences in the conclusions. The introductions contain, on the average, 8.55 per cent and the conclusions, 9.12 per cent of the total number of words in the speeches. The mean sentence length of the introductions is less than the mean sentence length of the conclusions. Sentences in the introductions and conclusions are shorter, on the average, than are the sentences in the body of the speech.

2. The variation in the average sentence length for the individual speeches is less in the introductions than in the conclusions. The

range for the former extends from 15 to 87 words; for the latter, from 7 to 122 words.

3. There are about twice as many figures of speech used in the conclusions as in the introductions.

4. Wilson in his introductions refers to the audience and to the speaker more often than he does to the subject or to the occasion. Wilson's introductions are predominately philosophical. Wilson uses exposition more often than he uses narrations. He uses no argumentation or description in his introductions. His style is predominately literal.

5. In 27 of the 50 speeches, Wilson uses the informal summary in his conclusions. The same relation between kinds of figures of speech is found in the conclusions as was noted for the entire speech, namely, mostly metaphors and few similes.

6. There is considerable difference between the per cent of the number of words in the introductions and conclusions to the total length of Wilson's speeches and the speeches of George W. Curtis, and a greater difference between Wilson's introductions and those found in Fosdick's sermons. There are fewer figures of speech in the introductions and conclusions in proportion to their length, than in the body of the speech, which is the reverse of the findings of Miss Rousseau.

The analytical work of the dissertation has shown: in spite of the variation in the average sentence length of the individual speeches and of the kinds of speeches, a marked similarity in the sentence length sequence is seen. Long sentences are followed by a sentence much shorter in length, then this short sentence is followed by several others each decreasing in length. Thus, the sentences vary in length in a more or less rythmical sequence.

RECOMMENDATIONS

With this investigation serving as a basis, the content of the individual speeches could be studied to determine the effect of form on thought or vice versa. Many content items can be studied in relation to form, such as kinds of argument, position of main verb, position of clauses, etc., with respect to sentence length and with respect to kinds of sentences.

It is hoped that the beginnings now made in the field of statistical analysis of oral style will be followed by studies of other great American and British orators. When there is an accumulation of

data on form of composition, then a detailed analysis of content in relation to form can be made.

The following are the speeches which were studied, together with the classification, the occasion for delivery and the publisher :

LEGISLATIVE :

1. "Presenting the Peace Treaty for Ratification," Address to the Senate of the United States, July 10, 1919. From official government publication in Mr. Wilson's files. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 537.
2. "For Declaration of War Against Germany," Address delivered at a joint session of the two Houses of Congress, April 2, 1917. From 65th Congress, 1st Session, Senate Document No. 5. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 6.
3. "National Currency and Banking," Delivered before Congress June 23, 1913. From the official publication in Mr. Wilson's files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 37.
4. "The Tariff," First Special Address to Congress asking immediate revision of the Payne-Aldrich Tariff, April 8, 1913. From *Congressional Record*, 63rd Congress, 1st Session, vol. 50, 130.
5. "Trusts and Monopolies," Special Address to Congress, January 20, 1914. From original copy corrected in Mr. Wilson's own hand. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 81.
6. "Methods of Railway Control," Delivered before a joint Session of both Houses of Congress, January 4, 1918. From official Government Publications in Mr. Wilson's file. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 150.
7. "Money for the War," Address delivered at a joint Session of both Houses of Congress, May 27, 1918. From official publications in Mr. Wilson's file. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 216.

CAMPAIGN :

8. "Address Delivered on Western Tour," Delivered at Columbus, Ohio, September 4, 1919. First address of tour. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 590.
9. "Outlining of the Administration's Program of Preparedness for National Defense," Address before the Manhattan Club, New York, November 4, 1915. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 304.
10. "The Rights of the Jew," Address at Carnegie Hall, New York, December 6, 1911. From "The Congressional Record," 62nd Congress 2nd Session, vol. 48, Appendix 497-498. *College and State*, New York: Harper & Bros., 1927, vol. II, 318.
11. "Democracy's Opportunity," Address at rally of Democratic Clubs of Harrisburg, Pennsylvania, June 15, 1911. From *Congressional Record* 62nd Congress, 2nd Session, vol. 48, Appendix, 519.
12. "Issues of Freedom," Address delivered at Banquet of Knife and Fork Club of Kansas City, Missouri, May 5, 1911. *College and State*, New York: Harper & Bros., 1927, vol. II, 283.

13. "League of Nations," Speech at Indianapolis, October 12, 1916. From the New York "Times," October 13, 1916. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 356.
14. "Princeton Ideals," Delivered at Princeton Dinner at the Waldorf-Astoria, December 9, 1902. From the *Princeton Alumni Weekly*, December 13, 1902, vol. III, 199-204.

EULOGY:

15. "The Heroes of Vera Cruz," Delivered upon the return of the bodies of the nineteen Marines who were killed in the storming of Vera Cruz, April 1914; services were held at the Brooklyn Navy Yard, May 11, 1914. William N. Brigance, *Classified Speech Models*, New York: F. S. Crofts and Co., 1928, 343.
16. "Robert E. Lee: An Interpretation," Delivered on the occasion of the Hundredth Anniversary of the Birth of Robert E. Lee, at the University of North Carolina, January 9, 1909. *College and State*, New York: Harper & Bros., 1927, vol. II, 64.

DEDICATION:

17. "Too Proud to Fight," Address to Several Thousand Foreign-Born Citizens, after Naturalization Ceremonies, Philadelphia, May 10, 1915. From The White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 318.
18. "Abraham Lincoln," Acceptance of the Lincoln Memorial, Hodgenville, Kentucky, September 4, 1916. From Congressional Record, 64th Congress, 1st Session, vol. 53, Appendix, 2160. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 292.
19. "Rededication of Congress Hall," Philadelphia, Pa., October 25, 1913. From Congressional Record, 63rd Congress, 1st Session, vol. 50, 5809-5810. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 58.
20. "Needs of the Red Cross," Address at the Dedication of the Red Cross Building, May 12, 1917. From Official Bulletin. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 32.
21. "Men Who Think First of Themselves Not True Americans," Address delivered at the unveiling of the statue to the memory of Commodore John Harry, Washington, May 16, 1914. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 107.
22. "Men Are Governed by Their Emotions," Address at the Dedication of the Federation of Labor Building, Washington, July 4, 1916. From Congressional Record, 64th Congress, 1st Session, vol. 53, 12127-12128. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 222.

ANNIVERSARY:

23. "The Meaning of the Declaration of Independence," Delivered in Independence Hall, Philadelphia, July 4, 1914. J. M. O'Neill, *Models of Speech Composition*, New York: The Century Co., 1926, 544.
24. "Be Servants of Mankind," Address delivered at Swarthmore College, October 25, 1913. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 54.

25. "Hard Tasks Ahead of the Nation," Address delivered at Gettysburg before G.A.R. and Confederate Veterans, upon occasion of Fiftieth Anniversary Reunion, July 4, 1913. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 41.
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27. "Americans No Swashbucklers," Flag Day Address, Washington, June 14, 1915. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 347.
28. "Meaning of the American Flag," Address at Flag Day exercises, June 15, 1914. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 131.
29. "A Day of Noble Memories, A Day of Dedication," Address to Confederate Veterans of Washington, July 5, 1917—from "Official Bulletin," No. 22, *War and Peace*, New York: Harper & Bros., 1927, vol. I, 54.

AFTER-DINNER:

30. "These are Days that Search Men's Hearts," Address at Jefferson Day Banquet, April 13, 1916. From the "Commercial and Financial Chronicle," April 5, 1916, vol. 102, 1406. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 140.
31. "The American College," Address at a dinner in honor of the inauguration of Ernest Fox Nichols as President of Dartmouth College, Oct. 14, 1909. J. M. O'Neill, *Models of Speech Composition*, New York: The Century Co., 1926, 612.
32. "The Puritan," Speech before the New England Society of New York City, December 22, 1900. *College and State*, New York: Harper & Bros., 1927, vol. I, 360.
33. "High Devotion of the Men of Science," Address delivered at the Centennial Celebration of the United States Coast and Geodetic Survey, Washington, April 6, 1916. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. II, 134.

INAUGURAL:

34. "Princeton for the Nation's Service," Inaugural Address as President of Princeton University, October 25, 1902. From the Princeton Alumni Weekly, November 1, 1902, vol. III, No. 6. *College and State*, New York: Harper & Bros., 1927, vol. I, 443.
35. "Inaugural Address as Governor of New Jersey," Delivered January 17, 1911. From the Journal of the Senate of New Jersey for 1911. *College and State*, New York: Harper & Bros., 1927, vol. II, 270.
36. "Second Inaugural Address," Delivered March 5, 1917. From official government publication in Mr. Wilson's files. *War and Peace*, New York: Harper & Bros., 1927, vol. I, 1.

SERMON :

38. "The Bible and Progress," Address in the Auditorium, Denver, Colorado, at the tercentenary celebration of the Translation of the Bible into the English Language, May 7, 1911. From Congressional Record, 62nd Congress, 2nd Session, vol. 48, Appendix, 499-502. *College and State*, New York: Harper & Bros., 1927, vol. II, 291.
39. "Baccalaureate Address," Last Address at Princeton University June 12, 1910. From original typed manuscript bearing Mr. Wilson's own corrections, at the Library of Princeton University. *College and State*, New York: Harper & Bros., 1927, vol. II, 234.
40. "The Minister and the Individual," Address before the McCormick Theological Seminary at Chicago, November 2, 1909. From the "Proceedings" of the Historical Celebration of the Eighteenth Anniversary of the Origin of the Seminary. *College and State*, New York: Harper & Bros., 1927, vol. II, 178.
41. "A New Kind of Church Life," Address before the Federal Council of Churches, Columbus, Ohio, December 10, 1915. From Congressional Record, 64th Congress, 1st Session, vol. 53, 15751-15753. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 429.
42. "Militant Christianity," Address at Y.M.C.A. Celebration, Pittsburgh, October 24, 1914. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 199.

LECTURE :

43. "A New Call to Duty," Commencement Address of the U. S. Military Naval Academy, Annapolis, Md., June 2, 1916. Mr. Wilson was attending these exercises merely in his official capacity as Commander-in-Chief of the Navy and came with no intention of speaking. But being called upon to say a few words before the diplomas were presented, he made this short speech. *The New Democracy*, New York: Harper & Bros., 1927, 197.
44. "The Training of Intellect," Brief informal address at Phi Beta Kappa Chapter, Yale University, 1908. J. M. O'Neill, *Models of Speech Composition*, New York: The Century Co., 1926, 844.
45. "The Ideal University," from Mr. Wilson's original typed manuscript with his pen-and-ink corrections, dated "Princeton University, 6 of July 1909," and signed with his autograph. *College and State*, New York: Harper & Bros., 1927, vol. II, 147.
46. "Law or Personal Power," Address delivered at the National Democratic Club, New York, April 13, 1908. From original typed manuscript with Mr. Wilson's corrections, in the Library of Princeton University. *College and State*, New York: Harper & Bros., 1927, vol. II, 24.
47. "The Preceptorial System," Address before the Western Association of Princeton Clubs at Cleveland, Ohio, May 19, 1906. From the Princeton Alumni Weekly, June 2, 1906, vol. 6, 651-655. *College and State*, New York: Harper & Bros., 1927, vol. I, 491.

48. "The Lawyer in Politics," Address before the Kentucky Bar Association at Lexington, Kentucky, July 12, 1911. From Congressional Record, 62nd Congress, 2nd Session, vol. 48, Appendix, 498-499. *College and State*, New York: Harper & Bros., 1927, vol. II, 310.
49. "Let There Be no Taint of Militarism Among You," Address at the Military Academy, West Point, June 13, 1916. From New York "Times," June 14, 1916. *The New Democracy*. New York: Harper & Bros., 1927, vol. II, 200.
50. "The Idea of America Is to Serve Humanity," Address to the graduating class of the United States Naval Academy, Annapolis, June 5, 1914. From the White House Files. *The New Democracy*, New York: Harper & Bros., 1927, vol. I, 126.

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